Patent claims

1. A method for braking a rotor (3, 30) of a turbine engine (31), with a turning gear (22) which has a drive fed from an energy source and having a drive shaft (28) to which the rotor (3, 30) can be coupled, during a cooling phase of the turbine (8) the rotor (3, 30) being driven by the drive by means of the then coupled drive shaft (28), characterized in that, after the conclusion of the cooling phase, to brake the rotor (3, 30), the latter drives the drive in reverse operation by means of the coupled drive shaft (28).

2. The method as claimed in claim 1, characterized in that, after the conclusion of the cooling phase, the drive is separated from the energy source and is connected to a load element.

3. The method as claimed in claim 1, characterized in that the drive is designed as a hydraulic motor (26) which in reverse operation works as a hydraulic pump.

4. The method as claimed in claim 1, characterized in that the drive is designed as an electric motor (33) which in reverse operation works as an electrical generator.

5. The method as claimed in claim 1, 2 or 3, characterized in that the rotor (3, 30) is mounted by means of an oil bearing (21), and in that, after the standstill of the rotor (3, 30), the energy supply of the oil bearing (21) is switched off.

6. A turning gear (22) for driving the rotor (3, 30) of a turbine engine (31), with a drive fed from an energy source and having a drive shaft (28) to which the rotor (3, 30) can be coupled, characterized in that the drive can be separated from the energy source and can be connected to a load element, and

in that, to brake the rotor (3, 30) the drive can be driven in reverse operation.

7. The gear as claimed in claim 6, characterized in that the drive is designed as a hydraulic motor (26) which in reverse operation works as a hydraulic pump, and in that a throttle or a valve is provided as a load element.

8. The gear as claimed in claim 6, characterized in that the drive is designed as an electric motor (33) which in reverse operation works as an electrical generator, and in that an electric consumer is provided as a load element.

9. The gear as claimed in one of claims 6 to 8, characterized in that the load element is designed as a regulatable load element.

10. The gear as claimed in one of claims 6 to 9, characterized in that the turbine engine (31) is designed as a gas turbine.

11. The gear as claimed in one of claims 6 to 9, characterized in that the turbine engine (31) is designed as a compressor.